Annual Report

1987-88

Ontario Waste Management Corporation

89-02316/

For more information about OWMC please call or write:

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July, 1988

The Honourable Jim Bradley
Minister of the Environment

Dear Mr. Bradley:

I have the honour of submitting the seventh annual report of the Ontario Waste Management Corporation for the fiscal year ended March 31, 1988.

Respectfully submitted.

D.A. Chant
Chairman and President

Highlights of the year

In 1987-88 OWMC:

- submitted a draft environmental assessment on its proposed waste treatment facility to the Ontario Ministry of the Environment
- published reports on the results of site assessment studies
- met with residents near the facility site to discuss the effects of the facility and mitigation measures
- developed an emergency plan for the facility and began discussions with regional municipalities about off-site emergency response
- sponsored and helped organize a tour of West German and Swedish waste treatment facilities for representatives of the Region of Niagara and the Township of West Lincoln
- published the *Industrial Waste Audit and Reduction Manual* for small and medium-sized manufacturers
- held the first of a series of waste audit and reduction seminars
- helped develop a computerized waste reduction advisory service for industry
- provided funding for independent reviews of OWMC's technical reports
- contacted industrial associations, environmental groups and other organizations throughout the province to inform them of our activities.

Chairman's Message

Dr. Donald Chant, Chairman and President

We reached an important milestone this year with the submission of our draft environmental assessment to the Ministry of the Environment. This document represents five years of detailed study, analysis, design and engineering work, and public consultation. It is certainly the most comprehensive environmental assessment ever done on a project in Ontario, and probably in Canada.

OWMC has come a long way since it was established in 1981, but there is still some distance to go. Our proposal to build and operate a world-class industrial waste treatment and disposal facility will be examined closely by the government in the months ahead. Following this review, our final environmental assessment will go to a public hearing where members of the public will have a chance to question OWMC's experts. I am confident that our proposal will stand up to the closest scrutiny.

OWMC also has a mandate to support waste reduction. To manage this province's wastes properly we must first reduce the amount of wastes generated by industry, and then treat and dispose of the remaining wastes in such a way that they do not endanger our environment.

Industry has told us that OWMC can be most effective by informing companies about the latest waste reduction technologies, methods and services. We have been doing this with our waste reduction newsletter, our new *Industrial Waste Audit and Reduction Manual*, and our training seminars – all of which have been well-received by industry. I foresee a great deal of progress in the area of waste reduction over the next few years.

I would like to thank the members of OWMC's Board of Directors and all our staff and consultants for their dedication and hard work over the past year. We can look forward to many more challenges and achievements in the year ahead. Special thanks to Mr. Harvey Polk and Mr. Frank Sommer, who retired from the Board of Directors in July, 1987.

D.A. Chant

Chairman and President

Board of Directors

Dr. Donald A. Chant
Chairman and President
Zoologist. Formerly Vice-President and Provost of the University of Toronto and Chairman of the Canadian Environmental Advisory Council

James M. King
Vice-Chairman
Formerly Chairman of the Board, Alfa-Laval Limited, Peterborough

G. Firman Bentley
President
Basic Petrochemicals Group, Polysar Limited, Sarnia

Maryon Brechin
Past-President, Consumers' Association of Canada, Burlington

Edith L. Fuller
Mayor, Town of Haldimand, Regional Municipality of Haldimand-Norfolk Cayuga

Arthur M. Renn
Formerly President of the Norfolk Federation of Agriculture and Director of the Ontario Federation of Agriculture, Windham Centre

R. Stephen Rodd
Professor, School of Agricultural Economics and Extension of Education University of Guelph

Tom Taylor
President, Preston Manufacturing Limited, Cambridge

Remuneration of Directors

The Directors of the Corporation, except the Chairman who is a salaried employee, are paid $200 a day for attending board and committee meetings.

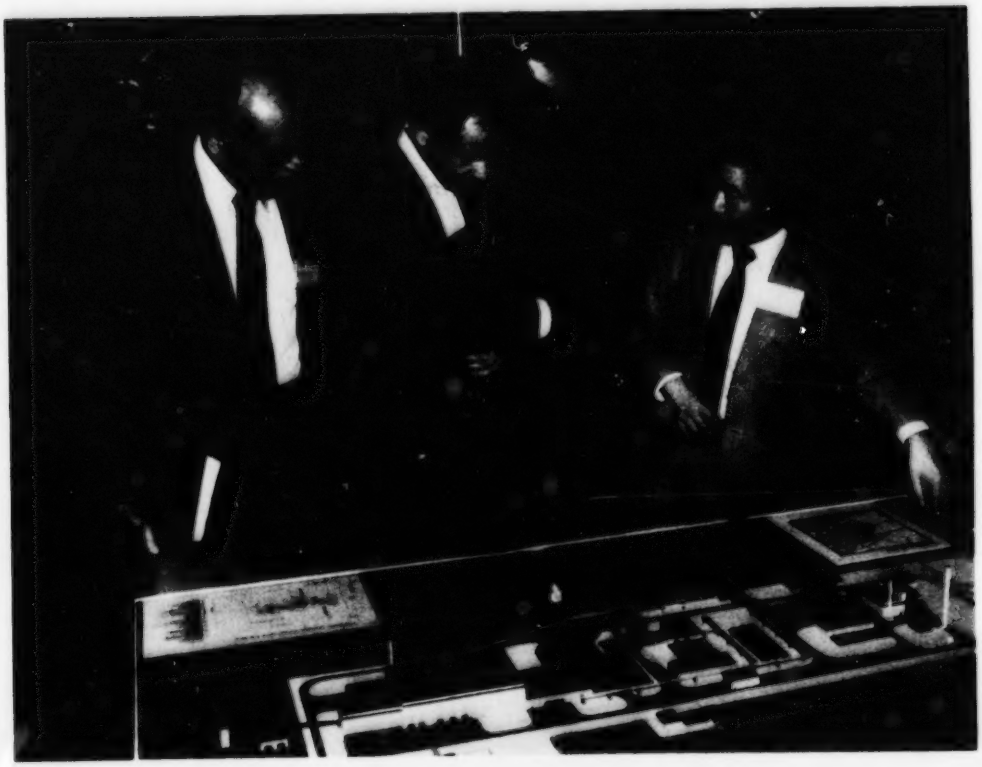
The total remuneration for all Directors for the year ended March 31, 1988 was $12,700 compared to $14,100 for the previous year.

OWMC's Undertaking

OWMC is proposing to build and operate an industrial waste treatment and disposal facility in the Township of West Lincoln, Regional Municipality of Niagara. As required by the Environmental Assessment Act, the Corporation has prepared a draft environmental assessment describing the kind of facility it wants to build.

This six-volume document explains why the facility is needed and the alternatives that were considered, selection of the site and technologies, probable effects, and mitigation measures.

A final submission will be made to the government after it has reviewed the draft document. OWMC's proposal will then go to a public hearing.
The hearings board and, ultimately, provincial Cabinet will decide if the facility will be built.



Dr. Chih Chao, process design co-ordinator (right), shows model of proposed facility to delegates at hazardous waste conference.

The Facility

OWMC's facility will be able to treat and dispose of up to 150,000 tonnes of industrial waste a year. Only radioactive, mining and municipal wastes will not be accepted. As the need for waste treatment grows, the facility will be expanded to a final capacity of 300,000 tonnes a year.

If approved, the entire facility will be built on a 124-hectare site at Highway 20 and Schram Road in West Lincoln township. Here, organic wastes will be destroyed in a rotary kiln incineration system and inorganic wastes will be detoxified, stabilized or reduced in the physical/chemical treatment plant. The residues from both incineration and treatment will be solidified and stabilized in the solidification plant and deposited in the engineered landfill.

The site (LF-9C) is located at Highway 20 and Schram Road in the Township of West Lincoln.

Design, Process Engineering and Operations

Most of the year was spent in completing the conceptual facility design, technologies, treatment, and operations for the environmental assessment.
In addition, reports were published on facility characteristics, design and operations, incineration technologies, flue gas treatment and solidification.

The treatment and solidification processes recommended by OWMC were tested in a laboratory using samples of wastes generated by Ontario industry. Test results will help determine the best combination of treatment methods for each type of waste.

A team of engineers and consultants closely examined the facility design, treatment processes and operating procedures to make sure that they meet the highest standards of safety.

OWMC's staff also developed a plan for responding to emergencies on the site. Meetings were held with municipal officials in Niagara region to start planning for emergencies off the site, particularly along the access route. OWMC has said that it will help municipalities prepare for and respond to emergencies such as spills of hazardous substances.

Edgar Schmidt (left), project manager, facilities development, Joseph Weber, plant manager of the HIM physical/chemical plant in Frankfurt, and Bob Kirk of Monenco Consultants Limited, are members of a team formed to make sure OWMC's facility meets the highest safety standards.

Site Assessment

The results of two years of site assessment studies were published in reports on geology and hydrogeology; atmospheric conditions; surface water; biology; agriculture; municipal finance; social and economic effects; transportation; risk assessment; archaeology; noise; and the visual impact of the proposed facility.

In 1987, OWMC staff and consultants met with the residents of 57 properties on and around the site to discuss how they will be affected by the facility. Before these meetings, a discussion paper entitled "OWMC and the West Lincoln Community: Managing Change" was sent to about 900 households near the site and along the access route. Another publication answering residents' questions was distributed after the meetings.

A common concern is how the facility will affect property values in the area. OWMC is recommending that residents near the site be compensated for any reduction in their property values. If this is approved by the government, homeowners in a designated area around the site will be guaranteed fair market value if they decide to move because of the facility.

Several other studies and tests were carried out in the area over the past year. In one, groundwater samples were collected at the site and analyzed to determine the rate of water movement through the soil. The results of these tests indicate that the thick clay soil under the site will contain leachate from the landfill.

Another study carried out by Ontario Hydro examined possible routes for a 115 kV transmission line to the facility. The route selected as having the least environmental effect starts from a new junction 3.5 kilometres north of the site and follows Silverdale Road.

OWMC continued to monitor air quality and atmospheric conditions at the site. Monitoring data have been used to assess the effects of emissions from the facility and will serve as a benchmark for measuring any changes when the facility starts operating.

Recommendations for additional monitoring of air, soil, water, and crops, and for the formation of a OWMC/ community monitoring committee, have been made in the draft environmental assessment.

Technicians with Longyear Canada Inc. install a piezometer at the facility site to collect groundwater samples at 15 and 25 metre depths.

Market Assessment

OWMC used three main sources of data to determine the need for a facility: surveys of companies, waste manifests, and the registry of hazardous and liquid industrial wastes governed by Regulation 309.

According to these sources, about 4.3 million tonnes of hazardous industrial waste are generated by Ontario industry every year. Of this amount, about 2.5 million tonnes are treated on-site and another 1.1 million tonnes are sent to licensed facilities for treatment and disposal.

These studies indicate that additional hazardous waste treatment facilities are needed in Ontario because of economic growth and tightening regulations such as those aimed at reducing water pollution (MISA).

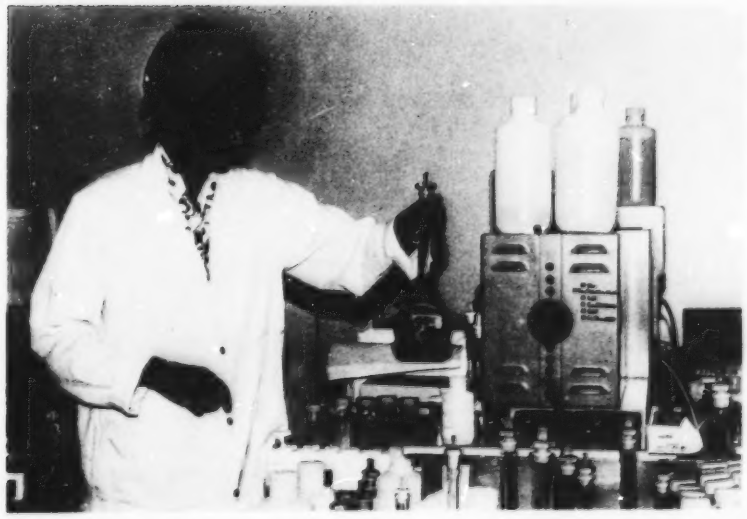
Laboratory Services

Analytical work at OWMC's Burlington laboratory is adding greatly to our knowledge of industrial wastes and laying the foundation for a permanent on-site laboratory.

Over the past year, chemists continued to develop analytical techniques for the many types of wastes that will be sent to the facility. They analyzed hundreds of industrial waste samples for characteristics such as metal content, flammability and heat value to help determine how wastes will be handled and treated at the facility.

The physical/chemical treatment methods selected for the facility are being tested using wastes that might be difficult to treat, such as those containing mercury and mixtures of metals and organics.

OWMC's laboratory also does work for corporate clients, analyzing their wastes to find out if they are hazardous, how they should be treated and their potential for reduction.



Under the supervision of Joan Etheridge, chemists at OWMC's Burlington laboratory are developing analytical techniques for the many different industrial wastes that will be treated at the facility.

Waste Reduction

OWMC encourages companies to adopt the 4Rs – reduction, reuse, recovery and recycling – by informing them about proven methods of cutting wastes.

A highlight of the year was the publication of OWMC's *Industrial Waste Audit and Reduction Manual*, a step-by-step guide for small and medium sized businesses. More than 400 copies were ordered in the first three months of publication.

Two more engineers were hired during the year to research the latest waste reduction methods, advise industry, and hold training sessions. The first waste audit and reduction seminar, in Ottawa, attracted 40 delegates from industry and government. Seminars will be held in other cities in the coming year.

Circulation of OWMC's waste reduction newsletter, the *Bulletin*, was increased from 8,000 to 13,000 waste generators in the province.

Another new service – a computer program giving examples of successful waste reduction in many different industries – is being developed in cooperation with six U.S. state agencies and will be tested in Ontario in the summer of 1988.

Waste management specialist Les Kuczynski (right) talks with a participant in waste auditing and reduction seminar.

Public Communications and Consultation

The regional office in Smithville continues to be the main source of information about OWMC activities for Niagara residents. Over the past year, regional office staff responded to many questions and concerns about our proposed waste treatment facility. They spoke to local students, service clubs, and other groups and organized meetings with residents who will be affected by the facility.

Many of the questions and concerns voiced by residents have to do with the kinds of technologies proposed for the facility. OWMC sponsored a 16-day tour of West German and Swedish waste treatment plants in September to familiarize community leaders with these technologies. Of particular interest was the HIM incineration plant in Biebesheim, West Germany – the model for OWMC's proposed rotary kiln incineration system.

Communications officer Tracy Patterson (right) and visitor to OWMC display at an open house in Shelburne.

Update newsletter is an important source of information about the Corporation's work. More than 74,000 homes and businesses in Niagara region received the newsletter in the last year. Future issues of *Update* will be published bimonthly and distributed throughout the province.

In the past year, communications staff talked to students, environmental organizations, industrial associations and others to bring them up-to-date on OWMC's work. A new videotape *Industrial Wastes: A Challenge We Must Meet* was produced to help explain to the public OWMC's role in managing hazardous wastes.

Funding

More than $26,000 in funding was awarded in 1987-88 for review of OWMC's site assessment reports. As in past years, funding decisions were made by an independent adjudicator, John Beaver of Cobourg.

The Township of West Lincoln and Region of Niagara received approximately $797,000 in funding to meet legal, administrative and other costs associated with the project.

Financial Statements

Statement of Financial Position

as at March 31, 1988

Assets	**1988**	1987
	($'000)	($'000)
Current		
Cash	**139**	1,644
Sundry receivables	**26**	53
Prepaid expenses	**47**	29
	212	1,726
Fixed (note 2)	**274**	280
	486	2,006

Liabilities and Deficit		
Current		
Accounts payable and accrued liabilities	**2,204**	1,634
(Deficit) retained earnings	**(1,718)**	372
	486	2,006

See accompanying notes to financial statements.

On behalf of the Board:

Chairman

Vice-Chairman

Statement of Operations and Deficit

for the year ended March 31, 1988

	1988	1987
	($'000)	($'000)
Revenue		
Grants from Province of Ontario	**13,600**	14,200
Interest and other	**42**	29
	13,642	14,229
Expenditure		
Salaries and benefits	**3,026**	2,985
Site assessment	**3,911**	4,151
Facilities design	**3,335**	1,956
Hearings preparation	**1,365**	300
Waste reduction and market assessment	**1,067**	654
Public funding	**823**	501
Office and general	**709**	540
Occupancy	**577**	621
Management consultants	**341**	194
Publications	**364**	272
Technical communication services	**119**	47
Depreciation	**75**	105
Directors' fees and expenses	**20**	22
	15,732	12,348
(Deficiency) excess of revenue over expenditure	**(2,090)**	1,881
Retained earnings (deficit), beginning of year	**372**	(1,509)
(Deficit) retained earnings, end of year	**(1,718)**	372

See accompanying notes to financial statements.

Statement of Changes in Financial Position

for the year ended March 31, 1988

	1988	1987
	($'000)	($'000)
Cash provided by (used in) operating activities		
(Deficiency) excess of revenue over expenditure	**(2,090)**	1,881
Charge to operations not requiring a current cash payment – depreciation	**75**	105
	(2,015)	1,986
Net change in non-cash working capital balances	**579**	(469)
Cash provided by (used in) operations	**(1,436)**	1,517
Cash provided by (used in) investing activities		
Additions to fixed assets	**(69)**	(41)
Net (decrease) increase in cash during the year	**(1,505)**	1,476
Cash, beginning of year	**1,644**	168
Cash, end of year	**139**	1,644

See accompanying notes to financial statements.

Auditor's report

To the Ontario Waste Management Corporation and to the Minister of the Environment

I have examined the statement of financial position of the Ontario Waste Management Corporation as at March 31, 1988 and the statements of operations and deficit and changes in financial position for the year then ended. My examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as I considered necessary in the circumstances.

In my opinion, these financial statements present fairly the financial position of the Corporation as at March 31, 1988 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

D.F. Archer, F.C.A.,
Provincial Auditor.

Toronto, Ontario.
May 31, 1988

Notes to Financial Statements

March 31, 1988

1. Significant Accounting Policies

i. Basis of accounting

These financial statements have been prepared in accordance with generally accepted accounting principles.

ii. Grants from Province of Ontario

Grants are recognized as revenue in the period in which they are committed by the Province.

iii. Fixed assets

Depreciation for furniture and equipment is computed on the declining balance basis at rates designed to amortize the cost of these assets over their estimated useful lives. Leasehold improvements are amortized on a straight-line basis.

2. Fixed Assets

	1988			1987	
	Cost	Accumulated Depreciation	Net Book Value	Net Book Value	Depreciation Rate
	($'000)	*($'000)*	*($'000)*	*($'000)*	
Furniture	238	146	92	105	20%
Equipment	344	190	154	137	20-30%
Leasehold improvements	161	133	28	38	5 years
	743	469	274	280	

3. Pension Plan

The Corporation provides pension benefits for permanent employees through participation in the Public Service Superannuation Fund of the Province of Ontario. The Corporation's share of contributions to the fund during the year was $93,905 (1987 – $93,389).

This contribution is included in salaries and benefits in the Statement of Operations and Deficit.

4. Lease Commitments

The Corporation is committed under operating leases on equipment and on leased premises to future minimum payments until October 1992 due as follows:

	($'000)
1989	348
1990	303
1991	207
1992	199
1993	116
	1,173

5. Contingent Liability

In May 1987, the Corporation entered into an agreement with Ontario Hydro for work related to the supply of electricity to the Corporation's proposed waste disposal facility. The cost for such work is estimated at $151,000 and will only be charged to the Corporation if construction of the facility does not proceed. Necessary approvals under the Environmental Assessment Act and other applicable statutes and by the Provincial Cabinet to construct the facility have not taken place as at March 31, 1988.

6. Comparative Figures

Certain comparative figures have been reclassified to conform with the 1988 presentation.